

METHOD AND APPARATUS FOR DESCRIBING MULTIPLE PACKETS TO HARDWARE

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ABSTRACT

A system and method for describing multiple packets to a communication module or device without requiring descriptors for each packet. A device driver for the communication apparatus receives a set of packet headers and a set of packet payloads from an upper layer protocol. The headers may be received in a header buffer, and the payloads may be received in a separate data buffer. Or, the packets may be received, in assembled form, in a single buffer. The device driver configures a single descriptor to describe the multiple packets to the communication apparatus. The descriptor includes base address(es) of the buffer(s) in which the headers, payloads or assembled packets are stored, and the lengths of the individual headers, payloads or assembled packets. If the buffer contents are not packed, the descriptor may also include offsets of the headers, payloads or packets.